

48.0 EXAMPLE SEED SPECIFICATIONS A. The seed mixtures and specifications shall meet the minimum requirements as specified below. Birdsfoot trefoil Crownvetch 1. Furnish the kinds and amounts of seed as indicated below to be seeded in Lespedeza, Korean Lespedeza, Sericea all areas designated. Sweetclover (List mixtures and amounts of each species here). Bluegrass, Canada Bluegrass, Kentucky 2. The minimum requirements for grass and legume seed used in the Fescue, tall 'Ky-31' vegetative work are as follows: Lovegrass, weeping, Boer, Lehmann's a. All seed must meet the requirements of the Maryland State or Reed canarygrass DPW-DDOT specifications. Ryegrass, Italian OTHER ANNUALS b. All seed shall be subject to re-testing by a recognized seed laboratory. Barley Millet All seed used shall have been tested within the six(6) months Sudangrass (non hybrids) immediately preceding the date of sowing such material on this *Seed containing prohibited or restricted noxious weeds should not be accepted. Prohibited noxious weeds - Johnsongrass or Johnsongrass crosses, Canada thistle, and Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant Restricted noxious weeds - Wild garlic and wild onion, bermudagrass, annual bluegrass, as directed on package. Use four times the recommended rate corn cockle, dodder and bindweed. when hydroseeding. VERY IMPORTANT - Keep inoculant as cool as possible until used. Temperatures above 75-80 degrees F. Seed should not contain in excess of 2.50 percent of weed seeds; none is desirable. weaken bacteria and make inoculant less effective. To calculate percent pure live seed, multiply germination times purity and divide by 100. Example: 'Ky-31' tall fescue with a germination of 85 percent and a purity of 97 percent. $97 \times 85 = 8245$. 82.45 - 100 = 82.45 percent pure live seed.

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52.0 MAINTAINING VEGETATION

Vegetation must be properly maintained if it is to provide effective erosion control on a continuing basis. Proper maintenance also ensures a healthy stand of vegetation that can withstand extreme climatic conditions and pest, weed, or disease infestation better than poorly maintained vegetation. Without adequate maintenance, the vegetative cover will gradually lose its ability to reduce runoff, and may eventually have to be replaced.

Soil and climatic conditions, specific plant requirements, and intended use of the area determine the maintenance requirements that must be met regularly. Such requirements may include mowing, fertilizing, liming, watering, pruning, fire control, weed and pest control, or reseeding. Any maintenance activities that are necessary must be performed regularly and promptly. Maintenance of vegetated areas may also require prompt removal of debris, and protection from unintended uses or traffic. An effective preventive maintenance program anticipates requirements and accomplishes work when it can be done with the least effort and expense.

The type of vegetation and the intended land use determine how frequently the various maintenance practices will be necessary.

Pest and disease control requirement s are usually more intensive on improved areas. Most insects, such as grubs, crickets, chinch bugs, grasshoppers, army worms, beetles and ants, feed on grass roots, stems and leaves and may cause considerable damage in a short space of time if not controlled. Rodents, such as field mice, ground squirrels, gophers, and moles, may damage vegetation and create hazards by burrowing and throwing up mounds on earthen structures. Insects and rodents should be kept under reasonable control.

Disease of herbaceous and woody plants are usually of minor importance where adapted species have been used and reasonably good management practiced. Trees that have been destroyed by disease or seriously damaged by insects should be removed. Removal of these diseased trees is essential if the disease or insect infestation is likely to spread to

Dry vegetation constitutes a fire hazard. The taller the vegetation, the greater the hazard. Herbaceoos vegetation on improved grounds may be less subject to serious fire, since it is kept well mowed and probably well watered. Tree and shrub areas on improved ground also undergo fairly intensive management. Debris, such as fallen trees and branches, is usually removed without undue delay and later is occasionally cleared away. These practices reduce fire hazards considerably. On unimproved grounds, vegetation is usually allowed to grow tall. Mowing and removing residue on occasion may help prevent fires in such areas.

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53.0 STANDARDS AND SPECIFICATIONS

Table 44 Geotextile Fabrics

DISTRICT OF COLUMBIA APPLICATION CLASS	TYPE OF GEOTEXTILE	GRAB STRENGTH lb D 4632	PUNCTURE STRENGTH lb D 4633	PERMITTIVITY sec ⁻¹ D 4491	APPARENT OPENING SIZE, max mm D4751	TRAPEZOID TEAR STRENGTH 1b D 4533
SD TYPE I	NONWOVEN	160	56	0.50	0.43	55
	WOVEN, MONOFILAMENT	250	90	0.50	0.43	90
TYPE II	NONWOVEN	160	56	0.20	0.25	55
	WOVEN, MONOFILAMENT	250	90	0.20	0.25	90
PE TYPE I	NONWOVEN	200	80	0.70	0.43	80
	WOVEN, MONOFILAMENT	250	90	0.70	0.43	90
TYPE II	NONWOVEN	200	80	0.20	0.25	80
	WOVEN, MONOFILAMENT	250	90	0.20	0.25	90
TYPE III	NONWOVEN	200	80	0.10	0.22	80
	WOVEN, MONOFILAMENT	250	90	0.10	0.22	90
SE	NONWOVEN	200	80	0.20	0.30	80
	WOVEN	250	90	0.20	0.30	90
ST	WOVEN	300*	110	0.05	0.15**	110
F	WOVEN	100	-	0.05	0.60	-
Е	NONWOVEN	90	30	0.50	0.30	30

Note 1: All property values are based on minimum average roll values in the weakest principle direction, except

-Grab tensile strength ASTM D 4632: 4x8" specimen, 1x2" clamps, 12"/min.

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strain rate in both principal directions of geotextile

ASTM D 4833 -Puncture Strength

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SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS MUST BE GIVEN TO THE DISTRICT OF COLUMBIA DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE

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2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL", REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETE WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAT 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE DISTRICT OF COLUMBIA SEDIMENT CONTROL INSPECTOR

7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. 8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE

9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS ON THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY,

DISTRICT OF COLUMBIA SEDIMENT CONTROL INSPECTOR.

WHICHEVER IS SHORTER

MATERIALS SPECIFICATIONS

DISTRICT OF COLUMBIA APPLICATION CLASS	TYPE OF GEOTEXTILE	GRAB STRENGTH lb D 4632	PUNCTURE STRENGTH lb D 4633	PERMITTIVITY sec ⁻¹ D 4491	OPENING SIZE, max mm D4751	TEAR STRENGTH lb D 4533
SD TYPE I	NONWOVEN	160	56	0.50	0.43	55
	WOVEN, MONOFILAMENT	250	90	0.50	0.43	90
TYPE II	NONWOVEN	160	56	0.20	0.25	55
	WOVEN, MONOFILAMENT	250	90	0.20	0.25	90
PE TYPE I	NONWOVEN	200	80	0.70	0.43	80
	WOVEN, MONOFILAMENT	250	90	0.70	0.43	90
TYPE II	NONWOVEN	200	80	0.20	0.25	80
	WOVEN, MONOFILAMENT	250	90	0.20	0.25	90
TYPE III	NONWOVEN	200	80	0.10	0.22	80
	WOVEN, MONOFILAMENT	250	90	0.10	0.22	90
SE	NONWOVEN	200	80	0.20	0.30	80
	WOVEN	250	90	0.20	0.30	90
ST	WOVEN	300*	110	0.05	0.15**	110
F	WOVEN	100	-	0.05	0.60	-
Е	NONWOVEN	90	30	0.50	0.30	30

for apparent opening size.

Note 2: The ultraviolet stability shall be 50 percent after 500 hours of exposure for all classes, except Class F, which shall be 70 percent (D 4355). * Minimum 15 percent elongation.

**This is a MINIMUM apparent opening size, not a maximum.

The properties shall be determined in accordance with the following procedures:

-Apparent opening size ASTM D-4751

DEDUCT ALTERNATES (ALT.)

and 02/E1.4.

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS BASE: Perforated metal screen with accent lighting as shown on DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete

accent lighting as shown on Drawing(s) 01/A2.4, 02/A2.4, 11/A5.2

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES

BASE: Elevator finishes as shown on the drawings. DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1

DEDUCT ALT. #3 - SITE IMPROVEMENTS BASE: All site work shown on the drawings. DEDUCT: Provide only site work shown on the Drawing(s)

01/CS3.1 and CS3.2. DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS

BASE: All landscape work and site furnishings shown on the DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES BASE: All automatic door opening devices shown on the drawings and hardware schedule. DEDUCT: Provide manual door closer as specified in Spec

Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS BASE: All card readers shown on the drawings and hardware DEDUCT: Provide manual door locks/latches as specified in

Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2. DEDUCT ALT. #7 - BARRIER CABLE SYSTEM

BASE: Barrier cable system as shown on the drawings. DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 - CRASH BARRIER, BOLLARDS AND

SECURITY GATES BASE: All crash barriers, bollards, and security gates shown on DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING

BASE: All site fencing shown on these drawings. DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1

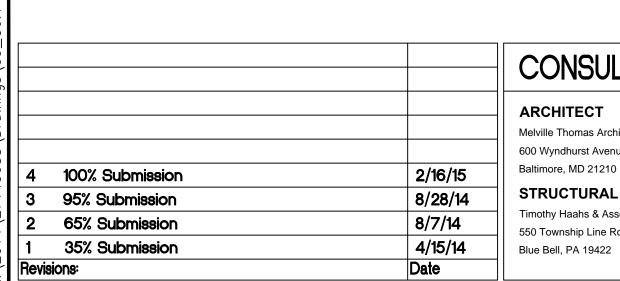
DEDUCT ALT. #10 - INTERIOR GARAGE BARRIER FENCING BASE: All cable type barrier fencing shown on the drawings. DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS BASE: Security cameras shown on the drawings. DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and

DEDUCT ALT. #12 - LED LIGHTING BASE: LED lighting as shown on the drawings. DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

DEDUCT ALT. #13- SECURITY BOOTH BASE: Security booth as shown on the drawings. DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS BASE: 2-1/2 new tiers as shown on the drawings. DEDUCT: Delete 1/2 tier connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.



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Medford, NY 11763

COST ESTIMATOR DMS Construction Consulting Services, Inc. 5550 Sterrett Place, Suite 300 Columbia, MD 21044 **CIVIL ENGINEER** KCI Technologies, Inc.

936 Ridgebrook Road

Sparks, MD 21152

Quality of Seed* Minimum

L-48-2

Germination (%)

March 2003

SEAL:

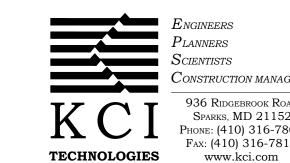
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Drawing Title EROSION AND SEDIMENT CONTROL Approved: Project Director

Project Title VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1 Location 50 IRVING ST. N.W. WASHINGTON, D.C.

Checked

Project Number Office of 688-345 Construction **Building Number** Drawing Number **CG6.1**

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and Facilities Management Department of Veterans Affairs